

**Minimum Temperatures.**—The minimum temperatures have been for northern stations. Yankton,  $-18^{\circ}$ ; St. Paul,  $-22^{\circ}$ ; Pike's Peak,  $-17^{\circ}$ ; Pembina,  $-48^{\circ}$ ; Omaha,  $-19^{\circ}$ ; Alpena,  $-11^{\circ}$ ; Burlington, Vt.,  $-12^{\circ}$ ; Breckenridge,  $-28^{\circ}$ ; Duluth,  $-28^{\circ}$ ; Eastport,  $-20^{\circ}$ ; Escanaba,  $-12^{\circ}$ ; Fort Sully,  $-28^{\circ}$ ; Marquette,  $-16^{\circ}$ ; Milwaukee,  $-10^{\circ}$ ; North Platte,  $-14^{\circ}$ ; Malone,  $-16^{\circ}$ ; Mount Washington,  $-42^{\circ}$ , and for southern stations, Galveston,  $35^{\circ}$ ; Indianola,  $33^{\circ}$ ; Jacksonville,  $36^{\circ}$ ; New Orleans,  $36^{\circ}$ ; St. Marks,  $30^{\circ}$ ; Brownsville, Texas,  $42^{\circ}$ ; Key West,  $63^{\circ}$ .

**Ranges of Temperatures.**—The least ranges of temperature have been: San Francisco,  $26^{\circ}$ ; Key West,  $22^{\circ}$ ; Galveston,  $39^{\circ}$  and Cape May,  $22^{\circ}$ .

**Frosts** destructive to vegetation and to the premature buds, are reported from Ohio, North Carolina, 24th; Virginia, 10th, and subsequently.

## PRECIPITATION.

**Amount of Rain and Snow.**—Chart No. III shows the general distribution of precipitation for the month, and that there has been in general an excess over the Lake region, New England and Canada, as also in Louisiana, and a deficiency in the remaining Gulf States, Tennessee, Ohio valley and the South Atlantic States. Snowfall is reported from 13 to 18 inches in Conn.; 5 or 6 in Ind., Ill., Iowa and Ken.; 23 to 29 in Maine; 11 to 22 in Mass.; 2 to 10 in Minn.; 4 to 7 in Neb.; 25 to 35 in N. H.; 7 to 48 in N. Y.;  $1\frac{1}{2}$  at Weldon, N. C.; 5 to 8 in Ohio; 6 to 13 in Penn.; 22 in Utah; 20 to 38 in Vt.; 2 to 4 in Va.; 10 in W. V.; 8 to 19 in Wis.

**Rainy days.**—The number of days on which rain or snow fell during February, averaged from 14 to 16 on the middle and east Atlantic coasts; from 16 to 20 in the Lake region; from 8 to 12 in the upper Mississippi and Ohio valleys; from 8 to 10 in the Southern States, except 16 in southern Louisiana. From 2 to 5 rainy days are reported from the plains of Kansas and Nebraska.

**Cloudy days.**—The number of cloudy days, (averaging eight-tenths or more of cloudiness,) for the Atlantic States, from Georgia to Maine, varied between 7 and 17, the latter number belonging to Middle Atlantic States and Long Island. From 5 to 11 cloudy days were reported from the region between the Alleghanies and the 100th meridian.

## RELATIVE HUMIDITY.

The mean relative humidity for February averages as follows, (not corrected for altitude.) *Dry stations:* Santa Fé, 39; Pike's Peak, 55; Dodge City, 48; Denver, 39; Colorado Springs, 35; Cheyenne, 45. *Damp stations:* Pembina, 92 (?); Albany, 84; Cleveland, 82; Marquette, 80; Mt. Washington, 84.

## WINDS.

**Wind directions.**—The prevailing winds are shown by the arrows upon Chart No. II, from which it will be seen that these have been decidedly northwesterly in all the northern half of the country, southerly in the Southwest, and northeast to southeast on the south Atlantic coast.

**Total movements.**—The sum total of the movements of the air from all directions, as given by the daily readings of anemometers, have been as follows, in miles. Large movements: Breckenridge, 10,574; Cheyenne, 11,531; Eastport, 10,110; Erie, 11,080; Grand Haven, 10,359; Indianola, 10,501; Kittyhawk, 10,052; Long Branch, 11,629; Manhattan, 10,228; Pike's Peak, 20,908; Sandy Hook, (?); Wood's Hole, 10,143; Thatcher's Island, 13,930. The record from Pike's Peak shows decidedly the largest monthly movement recorded there during the past three years. Small movements: Wytheville, 2,982; Savannah, 3,520; Salt Lake City, 2,460; Nashville, 3,588; Mobile, 3,936; Memphis, 3,561; Lynchburg, 2,832; Augusta, 2,899.

**The highest winds.**—The maximum winds of the month have been very severe, especially those in connection with the extensive storms of the 1st and 2d and the 15th and 16th. Among these the following are worthy of mention: On February 1st or 2d, Albany, northwest, 70 miles; Stapleton, N. Y., west, 60; Boston, southwest, 50; Barnegat, northwest, 60; Vevay, Ind., northwest, 60; Cape Henry, northwest, 52; Cape May, northwest, 56; Long Branch, northwest, 72; Springfield, Mass., northwest, 60; Lexington, Ky., south, 52; Flushing, 74; New York, northwest, 66; Thatcher's Island, northwest, 70; Newport, west, 80; Washington, northwest, 60 to 72. On other dates maximum winds of 50 miles per hour or more were experienced as follows: Dodge City, 29th, west, 50 miles; Duluth, 26th, northeast, 52; Cape Hatteras, 14th, southwest, 56; Kittyhawk, 22d, north, 60; Mt. Washington, 24th, northwest, 168; Malone, 12th, west, 60; Pike's Peak, 1st, southwest, 72; Port Huron, 19th, south, 50; Sandy Hook, 15th, northwest, 80. As an interesting instance of the power of a strong wind to produce eddies, in which very low pressure exists, it is reported that, on the early morning of the 2d, in Washington, a gust of at least 70 miles velocity, in rushing past an exposed dwelling in the higher part of the city, caused the windows of a small room on the leeward side of the house to burst outwards, a result evidently due simply to the expansion of the confined air, as the room doors were closed, and there was no fire-place or other way of escape.

**Local Storms.**—Storms of the nature of tornadoes or destructive gusts of wind were reported on the 13th near Friendsville, Ill.; 14th, at Buffalo, N. Y.; 27th, St. Charles, Mo., Princeton and St. Meinrad, Ind.

## WATER TEMPERATURES.

The monthly maximum and minimum temperature of the water in rivers and harbors, are given in a table on Chart No. II. Minima of  $30^{\circ}$  or  $32^{\circ}$ , were reported from Cleveland, Detroit, Duluth, Grand